

STATUS OF THE CLAIMS

Claims 1-27 were originally filed in this patent application. In response to a first office action dated 04/19/2006, an amendment was filed on 07/19/2006 that cancelled claims 16-17, 21-22 and 24-25 and amended claims 15, 20 and 23. In response to a second office action dated 10/04/2006, a Request for Reconsideration was filed on 01/04/2007. In response to a third office action dated 05/17/2007, an amendment was filed on 8/17/2007 that cancelled claims 2, 5-7, 9, 12-14, 18, 23, and 26-27 and amended claims 1, 4, 8, 11, 15 and 20. In response to a fourth office action dated 11/28/2007, an RCE and amendment was filed on 01/28/2008 that amended claims 1, 4, 8, 11, 15 and 20. In the pending office action dated 05/08/2008, claims 1, 4, 8, 11 and 15 were rejected under 35 U.S.C. §112, first paragraph. Claims 1, 3, 4, 8, 10, 11, 15, 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,785,675 to Graves *et al.* (hereinafter “Graves”) in view of U.S. Patent No. 6,163,776 to Periwal. No claim was allowed. In this amendment, claims 1, 3-4, 15 and 19-20 have been cancelled. Claims 8, 10 and 11 are currently pending.

REMARKS

Duplicate Claim Warning

The examiner provided a warning that should claims 1, 8 and 15 be found allowable, claims 4, 11 and 20 will be objected to under 37 C.F.R. 1.75 as being a substantial duplicate thereof. Claims 1, 4, 15 and 20 have been cancelled herein, and therefore need not be addressed. A careful comparison of claims 8 and 11 shows much of the claims are very similar. However, claim 8 includes the final clause “without caching the first result set and without interrogating the database.” This clause is not present in claim 11, and makes claims 8 and 11 patentably distinct. For this reason, the examiner’s warning about duplicate claims is in error.

Rejection of claims 1, 4, 8, 11, 15 and 20 under 35 U.S.C. §112

The examiner rejected claims 1, 4, 8, 11, 15 and 20 under 35 U.S.C. §112, first paragraph as containing subject matter which was not described in the specification. In particular, the examiner states the condition for evaluation at least one other query, *i.e.*, after interrogating the database has begun while processing the first query, was not described in the specification. Applicant respectfully asserts the language referred to in the claims is inherently supported in the specification according to common knowledge of one of ordinary skill in the art.

One skilled in the art will appreciate that execution of a query generally occurs in three phases: 1) preparing the query for execution (pre-execution phase); 2) executing the query by interrogating the database (execution phase); and 3) returning the result set from executing the query (post-execution phase). These phases are well-known to those of ordinary skill in the art. An article entitled “Understanding How PostgreSQL Executes a Query” at www.iphelp.ru/faw/15/ch04lev1sec3.html provides details of steps in executing a query. “After the PostgreSQL server receives a query from the client application, the text of the query is handed to the *parser*. The parser scans through the query and checks it for syntax errors. . . . After the parser has completed parsing the query, the parse tree is handed off to the planner/optimizer. . . . When all possible execution plans have been generated, the optimizer searches for the least-expensive plan. . . . After choosing the (apparently) least-expensive

execution plan, the query executor starts at the beginning of the plan and asks the topmost operator to produce a result set. . . . When the topmost operator completes its transformation, the results are returned to the client application.”

The pre-execution phase is performed by the parser and planner/optimizer discussed above. The result of this pre-execution phase is selecting a least-expensive plan for execution. The execution phase is performed by interrogating the database using the plan selected by the optimizer. The post-execution phase is performed by returning the results to the client application.

Applicant's FIG. 3 shows “Start Processing Query1” at point F on the timeline. The processing of Query1 is not complete until point I on the timeline. After Query1 has started to be processed at point F, Query2 is received at point G and Query3 is received at point H. Applicant respectfully asserts the processing of Query1 between point F and point I in FIG. 3 will necessarily require a pre-execution phase, an execution phase that involves interrogating the database, and a post-execution phase, as is known by those of ordinary skill in the art. Because these three phases (pre-execution, execution and post-execution) are performed in processing all queries, these phases are inherent to the processing of the query between points F and I on the timeline in FIG. 3. Because these phases are inherent in the processing of all database queries, applicant is free to limit the claims according to these well-known phases. The limitation “after interrogating the database has begun while processing the first query” means the processing of the first query has already entered the execution phase. This limitation is clearly supported by the processing of Query1 between points F and I in FIG. 3, because the processing of Query1 between points F and I will necessarily require a pre-execution phase, an execution phase, and a post-execution phase. Limiting the claims to something that occurs during the execution phase is fully supported by FIGS. 3 and 4 and the associated text in the specification when viewed in light of the steps taken to execute queries, which are well-known to those of ordinary skill in the art. Therefore, the limitations in applicant's claims are fully supported by the specification in light of the knowledge of one of ordinary skill in the art. As a result, one of ordinary skill in the art would easily recognize based on the disclosure how to make and use the invention. As a result,

the specification fully enables the claims, and applicant respectfully requests reconsideration of the examiner's rejection of the claims under 35 U.S.C. §112, first paragraph.

Rejection of claims 1, 3-4, 8, 10-11, 15, and 19-20 under 35 U.S.C. §103(a)

The examiner rejected claims 1, 3-4, 8, 10-11, 15, and 19-20 under 35 U.S.C. §103(a) as being unpatentable over Graves in view of Periwal. Claims 1, 3-4, 15 and 19-20 have been cancelled herein, and therefore need not be addressed. The remaining claims are addressed below.

Claim 8

In rejecting claim 8, the examiner states Graves discloses most of these limitations, then admits Graves does not teach that the evaluating the second query is after interrogating the database has begun. The examiner then states:

Periwal teaches that a database is interrogated with the SELECT statement while processing a query (Periwal, FIG. 14A, Box 1412).

The specific limitation in question in claim 8 is:

. . . after interrogating the database has begun while processing the first query, evaluating at least one other query that is received during the processing of the first query . . .

The examiner does not even allege Periwal discloses these limitations. As a result, the examiner has failed to establish a prima facie case of obviousness for claim 8 under 35 U.S.C. §103(a). Applicant readily admits Periwal teaches that a database is interrogated with the SELECT statement while processing the query that includes the SELECT statement. This is axiomatic, querying the database must be performed when processing a SELECT statement. However, Periwal has no teaching whatsoever of "after interrogating the database has begun while processing the first query, evaluating at least one other query that is received during the processing of the first query," as recited in claim 8. In short, Periwal has no bearing or

relationship to the specific teaching in the claims the examiner admitted was missing in Graves, namely “after interrogating the database has begun.”

Even if the examiner were to find some reference that teaches “after interrogating the database has begun while processing the first query, evaluating at least one other query that is received during the processing of the first query”, combining such a reference with Graves would not have been obvious to one of ordinary skill in the art at the time the invention was made. The very first sentence of the Graves Abstract states:

Independent and individual requests are aggregated and presented as a single request to a resource management system.

The entire disclosure of Graves thus discloses aggregating individual requests into a single request that is presented to the resource management system. In Graves, the single request cannot be presented to the resource management system until individual requests have been aggregated and a single request can then be formulated that represents the aggregated requests. As a result, Graves expressly teaches away from “after interrogating the database has begun while processing the first query, evaluating at least one other query that is received during the processing of the first query” as recited in claim 8. Because the entire goal of Graves is to aggregate multiple requests into a single request, it is impossible to evaluate at least one other query that is received during the processing of the first query after interrogating the database has begun while processing the first query, as expressly recited in claim 8. As a result, the combination of any reference that allegedly teaches “after interrogating the database has begun while processing the first query, evaluating at least one other query that is received during the processing of the first query” with Graves would be improper because the express teachings of Graves teach away from these limitations.

The examiner’s stated rationale for combining Graves and Periwal is also defective. The examiner states:

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention as made to include the condition as taught by Periwal into

Graves apparatus, method and program in order [sic] prepare the information for the query.

The reason for the combination given by the examiner is “in order [to] prepare the information for the query.” This makes no sense, and has no relationship whatsoever to the limitations in each reference being combined to allegedly arrive at the limitations in the claims. To establish obviousness, the examiner must state why it would be obvious to one of ordinary skill in the art to make the combination in the manner claimed. The examiner has made no such statement, and has therefore failed to establish a *prima facie* case of obviousness for claim 8 under 35 U.S.C. §103(a).

For the many reasons given above, claim 8 is allowable over the combination of Graves and Periwal, and applicant respectfully requests reconsideration of the examiner’s rejection of claim 8 under 35 U.S.C. §103(a).

Claim 10

Claim 10 depends on claim 8, which is allowable for the reasons given above. As a result, claim 10 is allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the examiner’s rejection of claim 10 under 35 U.S.C. §103(a).

Claim 11

Claim 11 includes limitations similar to those in claim 8 discussed above, and is therefore allowable for the same reasons. Applicant respectfully requests reconsideration of the examiner’s rejection of claim 11 under 35 U.S.C. §103(a).

Reservation of Rights

In this Amendment, applicant has cancelled claims 1, 3-4, 15 and 19-20 from further consideration in this application. Applicant is not conceding that the subject matter encompassed by claims 1, 3-4, 15 and 19-20 prior to this Amendment is not patentable over the art cited by the examiner. Claims 1, 3-4, 15 and 19-20 were cancelled in this Amendment solely to facilitate expeditious prosecution of the remaining claims. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by claims 1, 3-4, 15 and 19-20 as presented prior to this Amendment and additional claims in one or more continuing applications.

Conclusion

In summary, Graves does not teach, support, or suggest the unique combination of features in applicant's claims presently on file. Therefore, applicant respectfully asserts that all of applicant's claims are allowable. Such allowance at an early date is respectfully requested. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

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